108TH CONGRESS 2D SESSION

H. RES. 490

Recognizing and commending the achievements of the National Aeronautics and Space Administration, the Jet Propulsion Laboratory, and Cornell University in conducting the Mars Exploration Rover mission, and recognizing the importance of space exploration.

IN THE HOUSE OF REPRESENTATIVES

January 20, 2004

Mr. Dreier (for himself, Mr. Schiff, Mr. Rohrabacher, Mr. Gordon, Mr. Boehlert, Mr. Lampson, Mr. Walsh, Mr. Mollohan, Mr. Feeney, Mr. McDermott, Ms. Jackson-Lee of Texas, Mr. Costello, Ms. Lofgren, Mr. Moran of Virginia, Mr. Ehlers, Mr. Holt, Mr. Culberson, Mr. Alexander, Mr. Calvert, Mr. Berman, Mrs. Capps, Mr. Udall of Colorado, Mrs. Jones of Ohio, Mrs. Tauscher, Ms. Harman, Mr. Hinchey, Mr. Sherman, Mr. Bilirakis, and Ms. Roybal-Allard) submitted the following resolution; which was referred to the Committee on Science

RESOLUTION

Recognizing and commending the achievements of the National Aeronautics and Space Administration, the Jet Propulsion Laboratory, and Cornell University in conducting the Mars Exploration Rover mission, and recognizing the importance of space exploration.

Whereas since its inception in 1958 the National Aeronautics and Space Administration has achieved extraordinary scientific and technological feats;

- Whereas the National Aeronautics and Space Administration's exploration of space has taught us to view Earth, ourselves, and the universe in a new way, opening our eyes and minds to great and new possibilities;
- Whereas for over 40 years the National Aeronautics and Space Administration's Jet Propulsion Laboratory has led the world in the robotic exploration of the solar system, commanding the first United States unmanned missions to the Moon, Venus, Mars, Mercury, Jupiter, Saturn, Uranus, Neptune, and most recently, the edge of our solar system;
- Whereas the Jet Propulsion Laboratory began the space age for the United States in 1958 with the successful development and launch of the Explorer 1, the first United States satellite;
- Whereas the Jet Propulsion Laboratory conducted the first interplanetary mission, in which the Mariner 2 spacecraft arrived at Venus in December 1962;
- Whereas over 100 years ago Russian astrophysicist Konstantin Tsiolkovsky asked, "to observe Mars from a distance of several tens of kilometers, to land on its satellite or even on its surface, what could be more fantastic?";
- Whereas the Jet Propulsion Laboratory fulfilled Konstantin Tsiolkovsky's vision when it navigated the Viking mission, developed the Viking Orbiter, and in 1976 successfully operated the Viking 1 and 2 robot landers on Mars, the first missions to land a spacecraft safely on the surface of another planet;
- Whereas more than 26 years after its launch in 1977, the Jet Propulsion Laboratory's Voyager 1, which unlocked the

- mysteries of the outer planets of our solar system, continues to expand our understanding of the farthest reaches of our solar system;
- Whereas the Jet Propulsion Laboratory's Mars Pathfinder successfully landed on the Martian surface on July 4, 1997, launching the first United States free-roving exploration of another planet and inspiring a new generation of children to dream of the heavens;
- Whereas after a journey of nearly seven years the Jet Propulsion Laboratory's Cassini-Huygens spacecraft will enter Saturn's orbit and begin to explore the solar system's second largest planet on July 1, 2004, and subsequently dispatch Huygens, a European-built probe, to the surface of Titan, Saturn's largest moon;
- Whereas the Jet Propulsion Laboratory's Stardust spacecraft, having traveled more than 3,000,000,000 miles, will return to Earth on January 15, 2006, with the first extraterrestrial materials from beyond the orbit of the Moon;
- Whereas the Mars Exploration Rovers Spirit and Opportunity were launched on June 10, 2003, and July 7, 2003, respectively, on missions to search for evidence indicating that Mars once held conditions hospitable to life;
- Whereas Cornell University has led the development of the five science instruments carried by the two Rovers, is leading a science team consisting of 150 preeminent astronomers and engineers in the science investigation for the Mars mission, and is playing a leading role in both the operation of the two Rovers and the processing and analysis of the images and other data sent back to Earth;

- Whereas the Rovers' landing sites were selected on the basis of intensive study of orbital data collected by the Mars Global Surveyor and Mars Pathfinder missions;
- Whereas Spirit's landing site, formerly known as Gusev Crater and renamed Columbia Memorial Station, is thought to have once contained a large lake and may hold waterlaid sediments that preserve important records of the lake environment, the sediments' highlands origins, and the sediments' river trip;
- Whereas Opportunity's landing site, the Meridiani Planum, contains exposed deposits of a mineral that usually forms under watery conditions;
- Whereas each Rover will conduct a three-month scientific study of the geologic records at the sites and evaluate whether those conditions would have been suitable for life;
- Whereas each 384-pound Rover, roughly the size of a golf cart, traveled approximately 300,000,000 miles to reach Mars;
- Whereas the craft carrying each Rover reaches speeds nearing 12,000 miles per hour when entering the Mars atmosphere before decelerating to a vertical stop in just over six minutes;
- Whereas, during the period between entry into the Mars atmosphere and the Rovers' landing, over one dozen intricate operations need to be performed perfectly at just the right point for the Rovers to survive;
- Whereas Spirit successfully completed entry, descent, and landing on January 3, 2004, at 11:35 p.m. eastern standard time, and within hours was beaming photographs of the Martian surface back to Earth;

Whereas Spirit is to be joined on the surface of Mars by its twin, Opportunity, on January 24, 2004; and

Whereas the engineers, scientists, and technicians of the Jet Propulsion Laboratory have played a vital role in the Nation's space program and set an example for the rest of us to follow: Now therefore be it

1 Resolved, That the House of Representatives—

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- (1) commends the engineers, scientists, and technicians of the Jet Propulsion Laboratory and Cornell University for their years of effort leading up to the successful entry, descent, landing, and operation of the Mars Exploration Rover Spirit on the Martian surface on January 3, 2004;
- (2) recognizes the importance to the Nation and to humanity of the exploration of space; and
- (3) honors the achievements of the National Aeronautics and Space Administration, the Jet Propulsion Laboratory, and Cornell University in expanding our comprehension of the universe and fulfilling the human need to explore and understand.

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